



This manual contains important warnings and information.  
**READ AND KEEP IT FOR REFERENCE.**

INSTRUCTIONS

*First choice when quality counts.™*

STUBBY SIZE

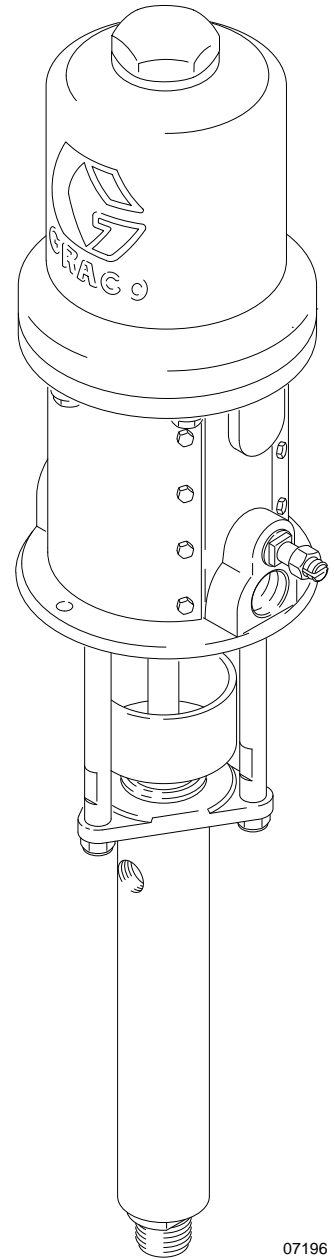
## 15:1 Ratio Monark® Pump

**Part No. 239-327, Series A**

*105 bar (10.5 MPa, 1500 psi) Maximum Fluid Working Pressure*

*7 bar (0.7 MPa, 100 psi) Maximum Air Input Pressure*

Refer to page 2 for the Table of Contents.



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# Symbols

## Warning Symbol



This symbol alerts you to the possibility of serious injury or death if you do not follow the instructions.

## Caution Symbol



This symbol alerts you to the possibility of damage to or destruction of equipment if you do not follow the corresponding instructions.

# ! WARNING



INSTRUCTIONS

## EQUIPMENT MISUSE HAZARD

Equipment misuse can cause the equipment to rupture or malfunction and result in serious injury.

- This equipment is for professional use only.
- Read all instruction manuals, tags, and labels before operating the equipment.
- Use the equipment only for its intended purpose. If you are uncertain about usage, call your Graco distributor.
- Do not alter or modify this equipment. Use only genuine Graco parts and accessories.
- Check equipment daily. Repair or replace worn or damaged parts immediately.
- Do not exceed the maximum working pressure of the lowest rated system component. Refer to the **Technical Data** on page 14 for the maximum working pressure of this equipment.
- Use fluids and solvents which are compatible with the equipment wetted parts. Refer to the **Technical Data** section of all equipment manuals. Read the fluid and solvent manufacturer's warnings.
- Do not use hoses to pull equipment.
- Route hoses away from traffic areas, sharp edges, moving parts, and hot surfaces. Do not expose Graco hoses to temperatures above 82°C (180°F) or below -40°C (-40°F).
- Wear hearing protection when operating this equipment.
- Do not lift pressurized equipment.
- Comply with all applicable local, state, and national fire, electrical, and safety regulations.

# WARNING



## INJECTION HAZARD

Spray from the gun, hose leaks, or ruptured components can inject fluid into your body and cause extremely serious injury, including the need for amputation. Fluid splashed in the eyes or on the skin can also cause serious injury.



- Fluid injected into the skin might look like just a cut, but it is a serious injury. **Get immediate medical attention.**
- Do not point the gun at anyone or at any part of the body.
- Do not put your hand or fingers over the spray tip.
- Do not stop or deflect leaks with your hand, body, glove or rag.
- Do not “blow back” fluid; this is not an air spray system.
- Always have the tip guard and the trigger guard on the gun when spraying.
- Check the gun diffuser operation weekly. Refer to the gun manual.
- Be sure the gun trigger safety operates before spraying.
- Lock the gun trigger safety when you stop spraying.
- Follow the **Pressure Relief Procedure** on page 8 whenever you: are instructed to relieve pressure; stop spraying; clean, check, or service the equipment; and install or clean the spray tip.
- Tighten all fluid connections before operating the equipment.
- Check the hoses, tubes, and couplings daily. Replace worn, damaged, or loose parts immediately. Permanently coupled hoses cannot be repaired; replace the entire hose.
- Use only Graco approved hoses. Do not remove any spring guard that is used to help protect the hose from rupture caused by kinks or bends near the couplings.



## MOVING PARTS HAZARD

Moving parts, such as the air motor piston, can pinch or amputate your fingers.

- Keep clear of all moving parts when starting or operating the pump.
- Before servicing the equipment, follow the **Pressure Relief Procedure** on page 8 to prevent the equipment from starting unexpectedly.

# WARNING



## FIRE AND EXPLOSION HAZARD

Improper grounding, poor ventilation, open flames or sparks can cause a hazardous condition and result in a fire or explosion and serious injury.



- Ground the equipment and the object being sprayed. Refer to **Grounding** on page 5.
- If there is any static sparking or you feel an electric shock while using this equipment, **stop spraying immediately**. Do not use the equipment until you identify and correct the problem.
- Provide fresh air ventilation to avoid the buildup of flammable fumes from solvents or the fluid being sprayed.
- Keep the spray area free of debris, including solvent, rags, and gasoline.
- Electrically disconnect all equipment in the spray area.
- Extinguish all open flames or pilot lights in the spray area.
- Do not smoke in the spray area.
- Do not turn on or off any light switch in the spray area while operating or if fumes are present.
- Do not operate a gasoline engine in the spray area.



## TOXIC FLUID HAZARD

Hazardous fluid or toxic fumes can cause serious injury or death if splashed in the eyes or on the skin, inhaled, or swallowed.

- Know the specific hazards of the fluid you are using.
- Store hazardous fluid in an approved container. Dispose of hazardous fluid according to all local, state and national guidelines.
- Always wear protective eyewear, gloves, clothing and respirator as recommended by the fluid and solvent manufacturer.

# Installation

## NOTES:

- Reference numbers and letters in parentheses in the text refer to the callouts in the figures and drawings.
- Always use Genuine Graco Parts and Accessories, available from your Graco distributor. If you supply your own accessories, be sure they are adequately sized and pressure-rated to meet the system's requirements.
- Fig. 2 is only a guide for selecting and installing system components and accessories. Contact your Graco distributor for assistance in designing a system to suit your particular needs.

## Prepare the Operator

All persons who operate the equipment must be trained in the safe, efficient operation of all system components as well as the proper handling of all fluids. All operators must thoroughly read all instruction manuals, tags, and labels before operating the equipment.

## Prepare the Site

Ensure that you have an adequate compressed air supply. Refer to the performance chart on page 15 to find the air consumption of your pump.

Keep the site clear of any obstacles or debris that could interfere with the operator's movement.

Have a grounded, metal pail available for use when flushing the system.

## Mounting the Pump

Mount the pump (A) to suit the type of installation planned. The pump dimensions and mounting hole layout are shown on page 13. If you are using a wall bracket (B), check that the wall is strong enough to support the weight of the equipment, hoses, fluid, and stress caused when the pump is in operation. Mount the wall bracket 1.5 m (5 ft) above the floor.

## Grounding

**⚠ WARNING**

**FIRE AND EXPLOSION HAZARD**  
Before operating the pump, ground the system as explained below. Also read the section **FIRE AND EXPLOSION HAZARD** on page 4.

- *Pump:* Use a ground wire and clamp. See Fig.1. Loosen the grounding lug locknut (W) and washer (X). Insert one end of a 12 ga (1.5 mm<sup>2</sup>) minimum ground wire (Y) into the slot in lug (Z) and tighten the locknut securely. Connect the other end of the wire to a true earth ground. For a ground wire and clamp, order Part No. 237-569.

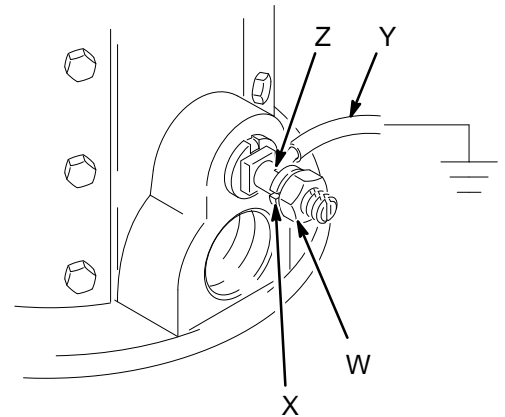


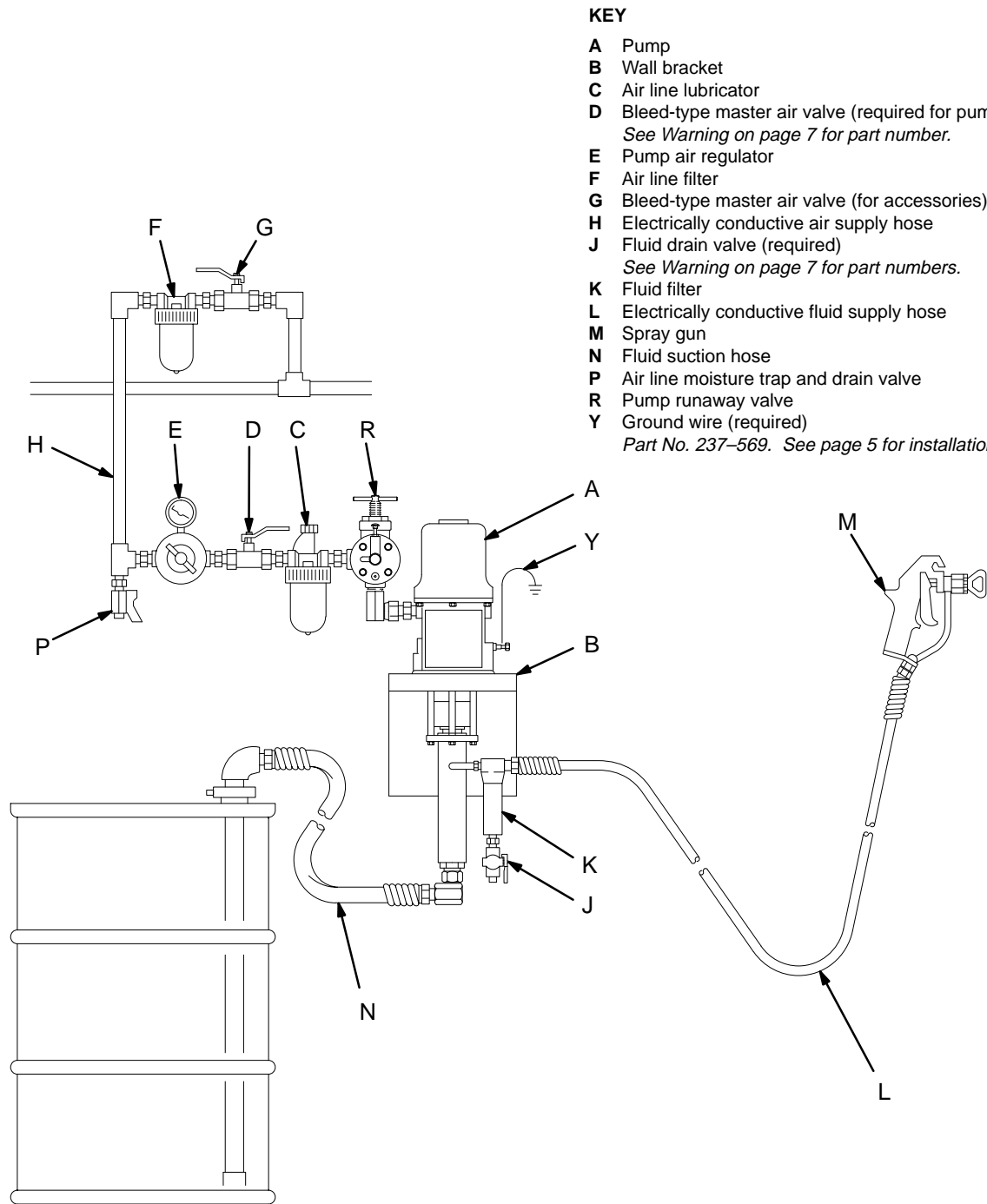
Fig. 1

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- *Air and fluid hoses:* Use only electrically conductive hoses with 150 m (500 ft) maximum combined hose length to ensure grounding continuity.
- *Air compressor:* Follow manufacturer's recommendations.
- *Spray gun or dispensing valve:* Connect to a properly grounded fluid hose and pump.
- *Object being sprayed:* Follow your local code.
- *Fluid supply container:* Follow your local code.
- *Solvent pails used when flushing:* Follow your local code. Use only metal pails, which are conductive, placed on a grounded surface. Do not place the pail on a nonconductive surface, such as paper or cardboard, which interrupts the grounding continuity.
- *To maintain proper grounding continuity when flushing or relieving pressure,* always hold the metal part of the spray gun firmly to the side of a grounded *metal* pail, then trigger the gun.

# Installation

## Typical Installation



### KEY

- A Pump
- B Wall bracket
- C Air line lubricator
- D Bleed-type master air valve (required for pump)  
*See Warning on page 7 for part number.*
- E Pump air regulator
- F Air line filter
- G Bleed-type master air valve (for accessories)
- H Electrically conductive air supply hose
- J Fluid drain valve (required)  
*See Warning on page 7 for part numbers.*
- K Fluid filter
- L Electrically conductive fluid supply hose
- M Spray gun
- N Fluid suction hose
- P Air line moisture trap and drain valve
- R Pump runaway valve
- Y Ground wire (required)  
*Part No. 237-569. See page 5 for installation instructions*

Fig. 2

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# Installation

## System Accessories

### **WARNING**

A bleed-type master air valve (D) and a fluid drain valve (J) are required in your system. These accessories help reduce the risk of serious injury including fluid injection, splashing in the eyes or on the skin, and injury from moving parts if you are adjusting or repairing the pump.

The bleed-type master air valve relieves air trapped between this valve and the pump after the air is shut off. Trapped air can cause the pump to cycle unexpectedly. Locate the valve close to the pump. Order Part No. 113–333.

The fluid drain valve assists in relieving fluid pressure in the displacement pump, hose, and gun. Triggering the gun to relieve pressure may not be sufficient. Order one of the following:

Part No.	Description
238–635	1/4 npt (mbe), carbon steel
210–657	1/4 npt (mbe), carbon steel
210–658	3/8 npt (mbe), carbon steel
210–659	1/4 npt x 3/8 npt (mbe), carbon steel
239–018	1/4 npt (mbe), stainless steel
235–992	1/4 npt x 3/8 npt (mbe), stainless steel

## Air and Fluid Hoses

Be sure all air and fluid hoses are properly sized and pressure-rated for your system. Use only electrically conductive air and fluid hoses. Use a 13 mm (1/2 in.) I.D. (minimum) air hose (H) to supply air to the pump.

Fluid hoses must have spring guards on both ends. Connect a fluid hose (L) to the pump's 3/8 npt(f) fluid outlet. Use of a short whip hose between the main fluid hose and the gun (M) allows freer gun movement. Connect a fluid suction hose or tube (N) to the pump's 3/4 npt(m) fluid intake.

## Air Line Accessories

Install the following accessories in the order shown in Fig. 2, using adapters as necessary:

- **Air line lubricator (C)**  
Provides automatic air motor lubrication.
- **Bleed-type master air valve (D)**  
Required in your system to relieve air trapped between it and the air motor when the valve is closed (see the **WARNING** at left). Be sure the bleed valve is easily accessible from the pump, and is located **downstream** from the air regulator (E).
- **Air regulator (E)**  
Controls pump speed and outlet pressure by adjusting the air pressure to the pump. Locate the regulator close to the pump, but **upstream** from the bleed-type master air valve (D).
- **Pump runaway valve (R)**  
Senses if the pump is running too fast and shuts off the air supply to the motor. A pump which runs too fast can be seriously damaged.
- **Air line filter (F)**  
Install an air line filter (F) and a moisture trap and drain valve (P) to help remove moisture and contaminants from the compressed air supply.
- **Second bleed-type air valve (G)**  
Isolates the air line accessories for servicing. Locate upstream from all other air line accessories.

## Fluid Line Accessories

Install the following accessories in the positions shown in Fig. 2, using adapters as necessary:

- **Fluid drain valve (J)**  
Required in your system to relieve fluid pressure in the hose and gun (see the **WARNING** at left). Install the drain valve so that it points down and the handle points up when it is opened.
- **Fluid filter (K)**  
Filters harmful particles from the fluid.
- **Spray gun (M)**  
Dispenses the fluid. The gun shown in Fig. 2 is an airless spray gun.

# Operation

## Pressure Relief Procedure

### WARNING



#### INJECTION HAZARD

The system pressure must be manually relieved to prevent the system from starting or spraying accidentally. Fluid under high pressure can be injected through the skin and cause serious injury. To reduce the risk of an injury from injection, splashing fluid, or moving parts, follow the **Pressure Relief Procedure** whenever you:

- are instructed to relieve the pressure,
- stop spraying,
- check or service any of the system equipment,
- or install or clean the spray tip.

1. Lock the gun trigger safety.
2. Shut off the air supply to the pump.
3. Close the bleed-type master air valve (required in your system).
4. Unlock the gun trigger safety.
5. Hold a metal part of the gun firmly to the side of a grounded metal pail, and trigger the gun to relieve pressure.
6. Lock the gun trigger safety.
7. Open the drain valve (required in your system), and have a container ready to catch the drainage.
8. Leave the drain valve open until you are ready to spray again.

*If you suspect that the spray tip or hose is completely clogged, or that pressure has not been fully relieved after following the steps above, **very slowly** loosen the tip guard retaining nut or hose end coupling and relieve pressure gradually, then loosen it completely. Then clear the tip or hose.*

## Flush the Pump Before First Use

The pump is tested with lightweight oil, which is left in to protect the pump parts. If the fluid you are using may be contaminated by the oil, flush it out with a compatible solvent before using the pump. If the pump is being used to supply a circulating system, allow the solvent to circulate until the pump is thoroughly flushed. See **Flushing the Pump** on page 9.

## Packing Nut/Wet-Cup

### WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** at left.

Keep the packing nut/wet-cup (V) filled with Graco Throat Seal Liquid (TSL) or compatible solvent to help prolong the packing life. Check the tightness of the packing nut weekly; tighten just enough to prevent leakage; do not overtighten it. See Fig. 3 on page 11. Relieve the pressure before adjusting the packing nut or adding TSL.

## Starting and Adjusting the Pump

Begin these steps **before** you install the spray tip.

1. Ensure that the air regulator (E) and bleed-type master air valve (D) are closed. See Fig. 2 on page 6.
2. Connect a suction hose (N) to the pump's fluid inlet, or lower the pump into a fluid supply container.
3. Hold a metal part of the spray gun (M) firmly to the side of a grounded metal pail and hold the trigger open.
4. Open the pump's bleed-type master air valve (D).
5. Slowly open the air regulator (E) until the pump starts; approximately 2.8 bar (0.28 MPa, 40 psi).
6. Cycle the pump slowly until all the air is pushed out and the pump and hoses are fully primed.
7. Release the spray gun trigger and lock the trigger safety. The pump should stall against pressure when you release the trigger.

### WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** at left.

8. Relieve the pressure.
9. Install the spray tip in the gun.



# Operation

## WARNING

### COMPONENT RUPTURE HAZARD



To reduce the risk of overpressurizing your system, which could cause component rupture and serious injury, *never exceed the specified maximum air input pressure to the pump* (see **Technical Data** on page 14).

- Control the pump speed and fluid pressure with the air regulator (E). Always use the lowest air pressure necessary to get the desired results. Higher pressure causes premature spray tip and pump wear.
- With the pump and lines primed, and with adequate air pressure and volume supplied, the pump starts and stops as the spray gun is opened and closed. In a circulating system, the pump runs continuously and speeds up or slows down as supply increases or decreases until the air supply is shut off.

## CAUTION

Never allow the pump to run dry of the fluid being pumped. A dry pump will quickly accelerate to a high speed, possibly damaging itself. If your pump accelerates quickly, or is running too fast, stop it immediately and check the fluid supply. If the supply container is empty and air has been pumped into the lines, refill the container and prime the pump and the lines with fluid, or flush and leave it filled with a compatible solvent. Be sure to eliminate all air from the fluid system.

## Shutdown and Care of the Pump

## WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 8.

For overnight shutdown, relieve the pressure, and always stop the pump at the bottom of the stroke to prevent the fluid from drying on the exposed displacement rod and damaging the throat packings.

Always flush the pump before the fluid dries on the displacement rod. See **Flushing the Pump**.

## Flushing the Pump

## WARNING



**FIRE AND EXPLOSION HAZARD**  
Before flushing, read the section **FIRE AND EXPLOSION HAZARD** on page 4. Be sure the entire system and flushing pails are properly grounded. Refer to **Grounding** on page 5.

Flush with a fluid that is compatible with the fluid you are pumping and with the wetted parts in your system. Check with your fluid manufacturer or supplier for recommended flushing fluids and flushing frequency. Always flush the pump before fluid dries on the displacement rod.

## CAUTION

Never leave water or water-base fluid in the pump overnight. If you are pumping water-base fluid, flush with water first, then with a rust inhibitor such as mineral spirits. Relieve the pressure, but leave the rust inhibitor in the pump to protect the parts from corrosion.

## WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 8.

- Relieve the pressure.
- Remove the spray tip from the gun.
- Hold a metal part of the gun firmly to the side of a grounded *metal* pail.
- Start the pump. Always use the lowest possible fluid pressure when flushing.
- Trigger the gun.
- Flush the system until clear solvent flows from the gun.
- Relieve the pressure.

# Troubleshooting

## WARNING

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 8.

1. Relieve the pressure.
2. Check all possible problems and solutions before disassembling pump.

Problem	Cause	Solution
Pump fails to operate.	Restricted line or inadequate air supply.	Clear; increase air supply.
	Insufficient air pressure; closed or clogged air valves, etc.	Open; clean (be sure to use air filter).
	Exhausted fluid supply.	Refill; purge all air from pump and fluid lines.
	Damaged air motor.	Service air motor. See manual 307–043.
	Dried fluid seizure of displacement rod.	Clean, check or replace throat packings. See manual 306–981. Always stop pump at bottom of stroke and keep wet-cup filled with compatible solvent.
Pump operates but output is low on both strokes.	Restricted line or inadequate air supply.	Clear; increase air supply.
	Insufficient air pressure; closed or clogged air valves, etc.	Open; clean (be sure to use air filter).
	Clogged fluid line, valves, etc.	Clear* (be sure to use fluid filter).
	Packing nut is too tight.	Loosen (see page 8).
Pump operates but output is low on downstroke.	Held open or worn intake valve.	Clear; service. See manual 306–981.
Pump operates but output is low on upstroke.	Held open or worn fluid piston valve or packings.	Clear; service. See manual 306–981.
Erratic or accelerated operation.	Exhausted fluid supply.	Refill; purge all air from pump and fluid lines.
	Held open or worn intake valve.	Clear; service. See manual 306–981.

\* To determine if the fluid hose or gun is obstructed, relieve the pressure and disconnect the fluid hose, and place a container at the pump fluid outlet to catch any fluid. Turn on the air just enough to start the pump; about 1.4 to 2.8 bar (0.14 to 0.28 MPa, 20 to 40 psi). If the pump starts when the air is turned on, the obstruction is in the fluid hose or gun.

# Service

## Disconnecting the Displacement Pump

### **WARNING**

To reduce the risk of serious injury whenever you are instructed to relieve pressure, always follow the **Pressure Relief Procedure** on page 8.

1. Flush the pump if possible. Stop the pump at the bottom of its stroke. Relieve the pressure.
2. Disconnect the air and fluid hoses. Remove the pump from its mounting. Note the relative position of the fluid outlet (S) to the air inlet (T). See Fig. 3.
3. Unscrew the tie rod locknuts (4) from the tie rods (3). Remove the cotter pin (5). Carefully pull the displacement pump (2) off the air motor (1). Unscrew the displacement rod (U) from the air motor (1). Inspect the o-ring (6).
4. Refer to manual 306–981 for displacement pump service. To service the air motor, refer to manual 307–043.

## Reconnecting the Displacement Pump

1. Lubricate the o-ring (6) and check that it is in place on the displacement rod (U).
2. Orient the fluid outlet (S) to the air inlet (T) as noted in step 2 under **Disconnecting the Displacement Pump**. Position the displacement pump (2) on the tie rods (3). See Fig. 3.
3. Screw the displacement rod (U) into the shaft of the air motor (1) until the pin holes are aligned. Install the cotter pin (5). Screw the locknuts (4) onto the tie rods (3) loosely.
4. Mount the pump and reconnect all hoses. Reconnect the ground wire if it was disconnected during repair. Tighten the packing nut (V). Fill the wet-cup with Graco Throat Seal Liquid or compatible solvent.
5. Tighten the tie rod locknuts (4) evenly, and torque to 20 to 27 N•m (15 to 20 ft-lb). Start the pump and run it at about 2.8 bar (0.28 MPa, 40 psi) air pressure, to check that it is operating properly.

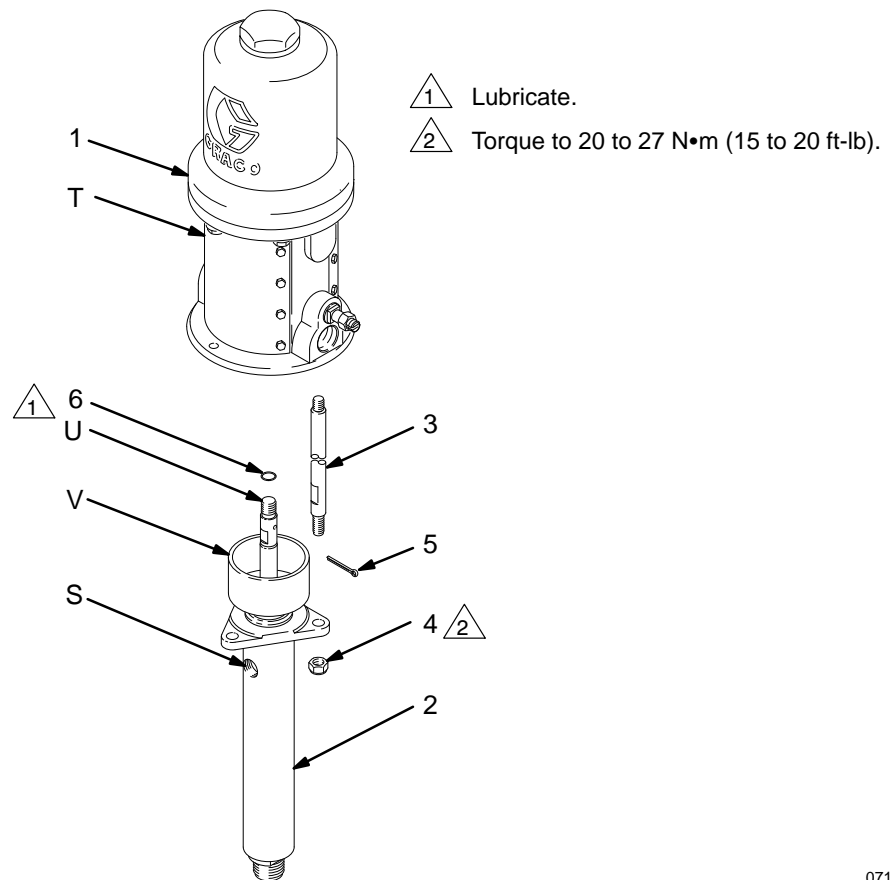
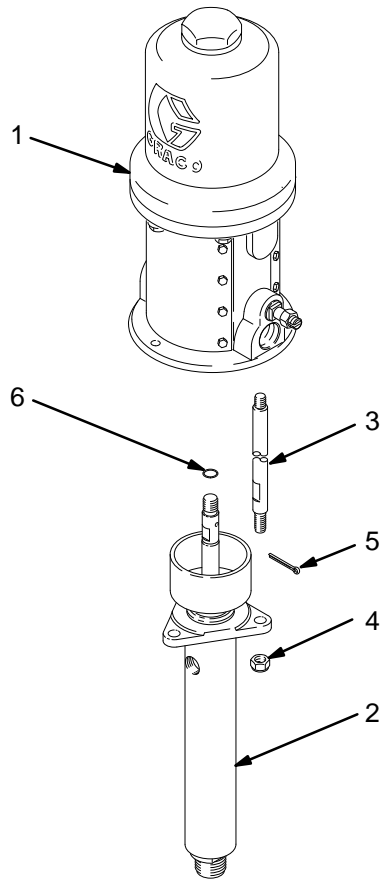


Fig. 3

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# Parts

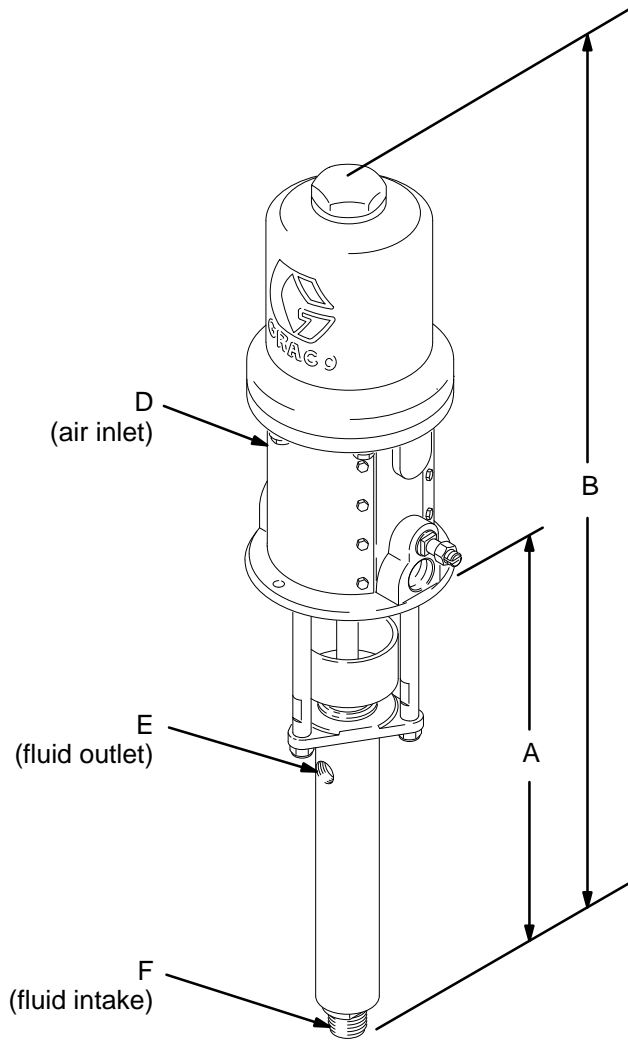
## Part No. 239-327, Series A



Ref No.	Part No.	Description	Qty
1	205-997	AIR MOTOR <i>see manual 307-043</i>	1
2	223-587	DISPLACEMENT PUMP ASSY, <i>see manual 306-981</i>	1
3	164-722	ROD, tie; carbon steel; 111 mm (4.375 in.) shoulder to shoulder	3
4	101-566	NUT, lock, 3/8-16	3
5	101-946	PIN, cotter, stainless steel	1
6	154-771	O-RING; buna-N	1

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# Dimensions

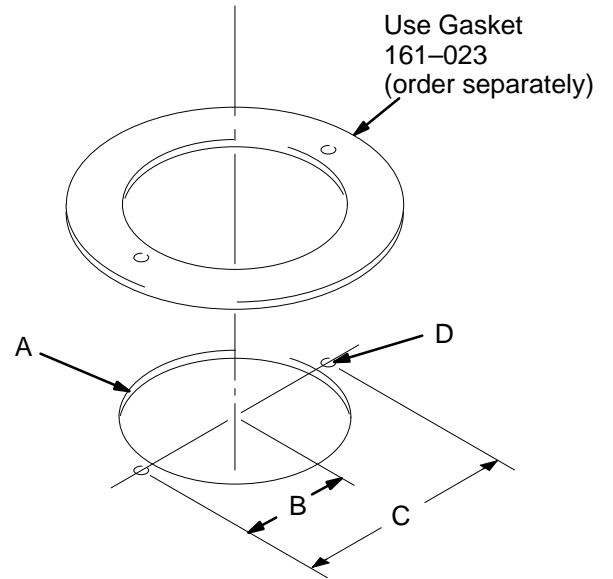


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Dimension	Measurement
A	382.5 mm (15.06 in.)
B	681 mm (26.81 in.)
D	1/2 npt(f)
E	3/8 npt(f)
F	3/4 npt(m)

# Mounting Hole Layout

- A 111.3 mm (4.38 in.) diameter
- B 64 mm (2.5 in.)
- C 127 mm (5.0 in.)
- D 7.1 mm (0.28 in.) diameter



# Technical Data

Category	Data
Ratio	15:1
Maximum fluid working pressure	105 bar (10.5 MPa, 1500 psi)
Maximum air input pressure	7 bar (0.7 MPa, 100 psi)
Fluid flow at 60 cycles per minute	1.9 liters/min (0.5 gpm)
Maximum pump operating temperature	82°C (180°F)
Wetted parts	Refer to manual 306–981.

## Sound Pressure Levels (dBa) (measured at 1 meter from unit)

Air Motor	Input Air Pressures at 15 cycles per minute		
	2.8 bar (0.28 MPa, 40 psi)	4.8 bar (0.48 MPa, 70 psi)	7 bar (0.7 MPa, 100 psi)
Monark	73.3 dB(A)	75.9 dB(A)	77.7 dB(A)

## Sound Power Levels (dBa) (tested in accordance with ISO 9614–2)

Air Motor	Input Air Pressures at 15 cycles per minute		
	2.8 bar (0.28 MPa, 40 psi)	4.8 bar (0.48 MPa, 70 psi)	7 bar (0.7 MPa, 100 psi)
Monark	87.0 dB(A)	89.7 dB(A)	91.4 dB(A)

# Technical Data

## Performance Chart

**KEY:**

Fluid Outlet Pressure – Black Curves  
 Air Consumption – Gray Curves

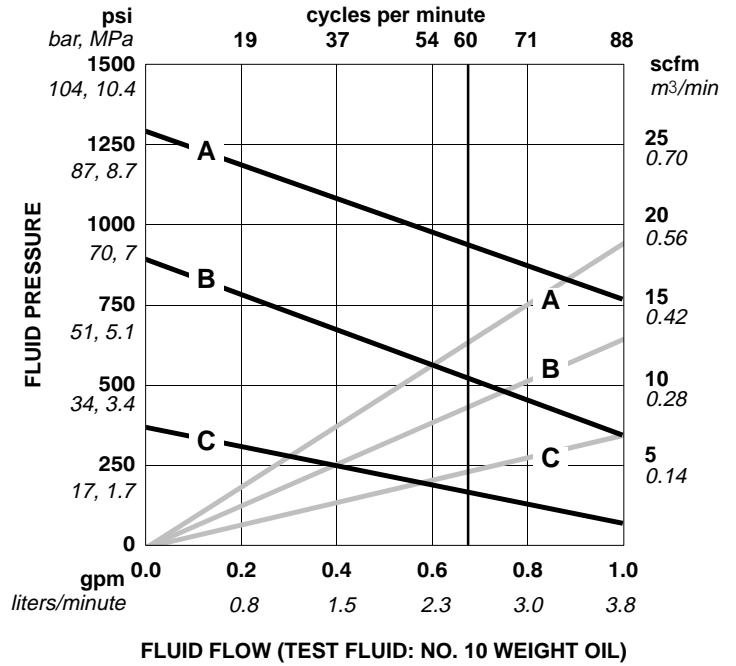
- A 7 bar (0.7 MPa, 100 psi) Air Pressure
- B 4.9 bar (0.49 MPa, 70 psi) Air Pressure
- C 2.8 bar (0.28 MPa, 40 psi) Air Pressure

**To find fluid outlet pressure (bar/MPa/psi) at a specific fluid flow (lpm/gpm) and operating air pressure (bar/MPa/psi):**

1. Locate desired flow along bottom of chart.
2. Follow vertical line up to intersection with selected fluid outlet pressure curve (black). Follow left to scale to read fluid outlet pressure.

**To find pump air consumption (m<sup>3</sup>/min or scfm) at a specific fluid flow (lpm/gpm) and air pressure (bar/MPa/psi):**

1. Locate desired flow along bottom of chart.
2. Read vertical line up to intersection with selected air consumption curve (gray). Follow right to scale to read air consumption.



# The Graco Warranty and Disclaimers

Graco warrants all equipment referenced in this document which is manufactured by Graco and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized Graco distributor to the original purchaser for use. With the exception of any special, extended, or limited warranty published by Graco, Graco will, for a period of twelve months from the date of sale, repair or replace any part of the equipment determined by Graco to be defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with Graco's written recommendations.

This warranty does not cover, and Graco shall not be liable for general wear and tear, or any malfunction, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, or substitution of non-Graco component parts. Nor shall Graco be liable for malfunction, damage or wear caused by the incompatibility of Graco equipment with structures, accessories, equipment or materials not supplied by Graco, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by Graco.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective to an authorized Graco distributor for verification of the claimed defect. If the claimed defect is verified, Graco will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge, which charges may include the costs of parts, labor, and transportation.

**THIS WARRANTY IS EXCLUSIVE, AND IS IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.**

Graco's sole obligation and buyer's sole remedy for any breach of warranty shall be as set forth above. The buyer agrees that no other remedy (including, but not limited to, incidental or consequential damages for lost profits, lost sales, injury to person or property, or any other incidental or consequential loss) shall be available. Any action for breach of warranty must be brought within two (2) years of the date of sale.

**GRACO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, IN CONNECTION WITH ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY GRACO.** These items sold, but not manufactured by Graco (such as electric motors, switches, hose, etc.), are subject to the warranty, if any, of their manufacturer. Graco will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

In no event will Graco be liable for indirect, incidental, special or consequential damages resulting from Graco supplying equipment hereunder, or the furnishing, performance, or use of any products or other goods sold hereto, whether due to a breach of contract, breach of warranty, the negligence of Graco, or otherwise.

## **FOR GRACO CANADA CUSTOMERS**

The parties acknowledge that they have required that the present document, as well as all documents, notices and legal proceedings entered into, given or instituted pursuant hereto or relating directly or indirectly hereto, be drawn up in English. Les parties reconnaissent avoir convenu que la rédaction du présente document sera en Anglais, ainsi que tous documents, avis et procédures judiciaires exécutés, donnés ou intentés à la suite de ou en rapport, directement ou indirectement, avec les procédures concernées.

## Graco Phone Number

**TO PLACE AN ORDER**, contact your Graco distributor, or call this number to identify the distributor closest to you:  
**1-800-367-4023 Toll Free**

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**Sales Offices:** Minneapolis, Detroit, Los Angeles  
**Foreign Offices:** Belgium, Canada, England, Korea, France, Germany, Hong Kong, Japan

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